

Abstract

A communication system for implementing personalizable and customizable features, comprising a tuple space, and a plurality of user agents representing the features, the user agents communicating with each other via assertions posted to the tuple space in order to implement the features while avoiding feature interactions, each of the features being structured as a set of deontic task trees having a parent node with an obliged inherent action and a plurality of child nodes with respective node actions performed according to a predetermined sequence, the results of which are reported back to the parent node, the parent node placing deontic modalities on the behavior of the child nodes such that successful implementation of the feature results from successful occurrence of the inherent action and composed success of the node actions of the children nodes.